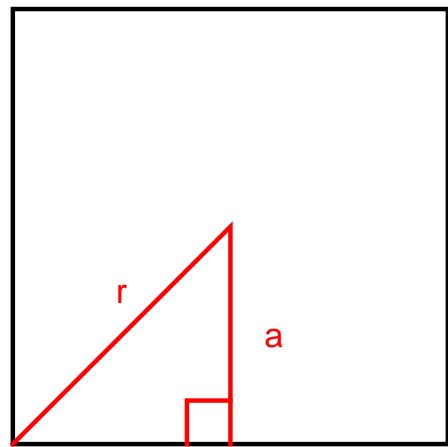
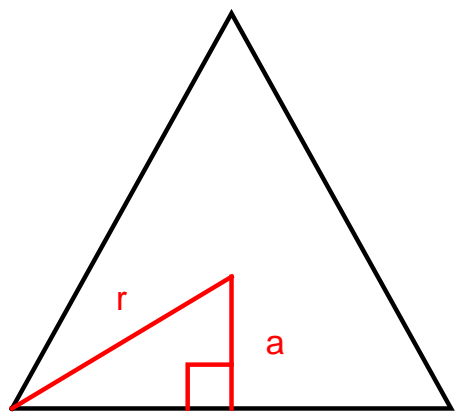


# Worksheet 9.4: Areas of Regular Polygons

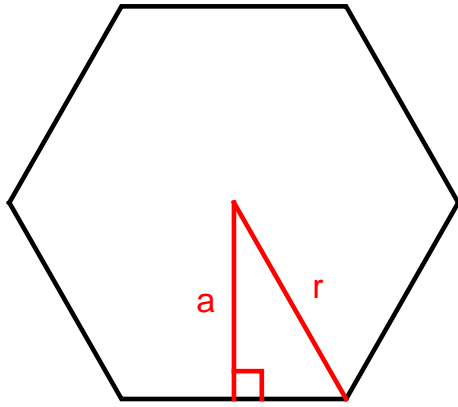
Complete the tables for the regular polygons shown.



	r	a	A
1.	$4\sqrt{2}$		
2.		10	
3.			81
4.		$2\sqrt{3}$	



	r	a	p	A
5.	4			
6.		10		
7.			24	
8.			$18\sqrt{3}$	



	r	a	p	A
9.	4			
10.		$10\sqrt{3}$		
11.		12		
12.			$24\sqrt{3}$	

Find the area of each polygon.

13. Square with radius  $4k$ .

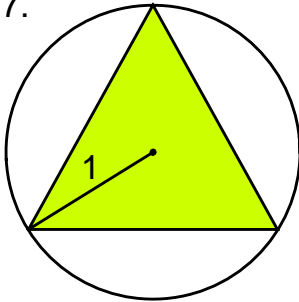
14. Regular hexagon with perimeter 144.

15. Equilateral triangle with radius  $2\sqrt{3}$ .

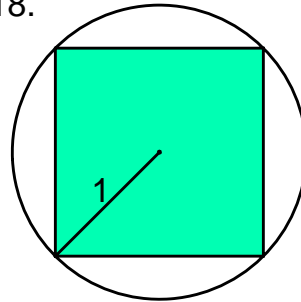
16. Regular hexagon with apothem 4.

Three regular polygons are inscribed in circles with radii 1. Find the apothem, the perimeter, and the area of each polygon.

17.



18.



19.

